ABSTRACT

A hyperspectral imager including a first optical sub-system, at least one slit element, a second optical sub-system, at least one reflective dispersive element located at a center plane, and at least one detecting element located at substantially an image surface. During operation, the first optical sub-system images, onto the slit element(s), electromagnetic radiation originating at a source. The second optical sub-system substantially collimates, at a center plane, electromagnetic radiation emanating from the slit element(s). The second optical sub-system also images, onto the image surface, the electromagnetic radiation reflected from the reflective dispersive element(s). The detecting element(s) detect the dispersed electromagnetic radiation reflected from the reflective dispersive element(s).

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